Hazard Review and Work Authorization for Computer Maintenance and Setup

Purpose

This Meteorology and Air Quality Group (MAQ) hazard review (HR) describes activities associated with installation, maintenance, and repair of computers and related peripheral equipment by MAQ group members. This plan also covers installation of UPS systems and external battery connection/replacement.

Scope

This HR applies to the MAQ group computers at TA-0, 34, 53, 54, and 59.

History of revision

This table lists the revision history and effective dates of this Hazard Review.

| Revision | Date | Description Of Changes |
|----------|----------|--|
| 0 | 12/22/98 | New document, issued as Hazard Control Plan. |
| 1 | 12/21/00 | Revision of HCP. |
| 2 | 2/15/02 | Revision of HCP. |
| 3 | 10/13/04 | Reformatted into Hazard Review. |

Signatures

| Prepared by: | Date: | Approved by: | Date: |
|--------------------------|-----------------|----------------------------------|-----------------|
| | | | |
| Charlene Kellner, MAQ | 10/12/04 | Steve Story, Project Leader, MAQ | <u>10/12/04</u> |
| Approved by: | Date: | Work authorized by: | Date: |
| | | | |
| Terry Morgan, QA Officer | <u>10/13/04</u> | Jean Dewart, MAQ Group Leader | <u>10/20/04</u> |

11/08/04

CONTROLLED DOCUMENT

Activity Description/Overview

| Work tasks/Steps | Hazards, Concerns, and Potential accidents; Likelihood/ Severity | Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.) | Hazard Level from IMP 300-00-00 Hazard Grading Matrix |
|---|--|--|--|
| Lifting and moving computers and peripherals. | Back injuries and strains or pinches. | Workers shall use proper lifting techniques and equipment (e.g., support belt, carts, etc.) for moving and installing equipment. The worker shall seek help for items which are too heavy. Equipment shall be installed on suitable platforms. Authorized worker should oversee the proper lifting techniques of helpers. | Low |
| Electrical shocks | Electrical shocks, burns, damage to equipment caused by shorts or physical damage. | Computer and peripherals: MAQ personnel are not authorized to perform work on any internal power supply and shall not open the interal power supply protective case. Since the power supply will not be opened, work performed on computer systems by MAQ workers is not considered hazardous in accordance with LIG 402-600-01, Table 2.1 | Low |

| Work tasks/Steps | Hazards, Concerns, and Potential accidents; Likelihood/ Severity | Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.) | Hazard Level from IMP 300-00-00 Hazard Grading Matrix |
|--|--|--|--|
| Set up and install UPS power supplies and connect/replace external batteries. Note: the batteries used in UPS systems are recyclable and shall not be disposed of in the trash. Batteries shall be returned to a factory-authorized service center. | Electrical shocks, arcing, burns. | MAQ workers are not authorized to perform internal maintenance or repair on UPS systems or battery packs. The UPS must be disconnected from power sources and loads and deenergized before battery connection/ replacement. To deenergize the UPS and connect/ replace the battery(s), read and follow the manufacturer's instructions. NOTE: No worker in MAQ is authorized to perform internal maintenance or repair on UPS systems or battery packs. | Low |
| Remove covers to work on equipment using small hand tools, remove or install cables, move equipment, etc. | Cut, Puncture, Pinch Hazards | Before beginning work, workers shall visually identify any sharp edges, tight spaces or hinged parts which might cause injury. | Low |
| Work inside equipment to remove, adjust, or install components. | Burn hazards | Before beginning work, workers shall identify any potentially hot (thermally) parts inside the equipment (mainly printers). | Low |
| Transport computer components as needed between MAQ sites. | Potential implosion of CRT screens during a vehicle crash. | Transport CRTs in a shipping box whenever possible. | Low |

| RRES-MAQ-HR-Computers, | R3 |
|------------------------|-----------|
| Page 4 of 4 | |

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Wastes or residual materials resulting from process

None.

Prerequesites

In addition to training to this HR, the following training is required before performing work in this HR:

- watch a videotape on proper lifting and back injury prevention.
- complete the training plan "R&D Electrical Workers: Non-Energized or Electronic/Computer Technicians: Non-Energized."

The following training is recommended:

• exercises, as recommended by Wellness Center trainers, to strengthen and tone muscles used in lifting.

Emergency actions to take possible. in event of control failures

Perform first aid as appropriate, see HSR-2 for medical attention. Notify supervisor and group leader as soon as possible.

Click here to record "self-study" training to this HR.

NOTE: Training to this document, as recorded in the EDS system, constitutes authorization to perform the work.